

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	Wendell M. Smith
Application No. 10/635,389	Filing Date: August 6, 2003
Title of Application:	Secure Document Printing
Confirmation No. 1191	Art Unit: 2625
Examiner	Satwant K. Singh

Mail Stop Amendment  
Commissioner for Patents  
Post Office Box 1450  
Alexandria, VA 22313-1450

**Declaration of Inventors of Prior Invention Under 37 CFR §1.131**

Wendell Smith declares as follows:

1. I am an inventor named in the above application.
2. I conceived of the Secure Document Printing in the United States of America to which the above application is directed at least as early as April 2002 including the subject matter of all pending claims in US Patent Application Serial No. 10/635,389.
3. I diligently worked on perfecting and reducing my invention practice from at least April 2002 until the invention was constructively reduced to practice in the United States of America.
4. Attached at A is a true and accurate copy of a handwritten document (typewritten document attached) entitled "Document Verification System" which describes my invention of secure document printing and is signed by Wendell M. Smith "WMS" and Ms. Margret M. Smith, dated April 20, 2002.
5. Attached at B is a true and accurate copy of my invention disclosure, which is dated April 27, 2002 and entitled "Secure Document Printing" in which the my invention is described in detail including, but not limited to, disclosure that that security data specific to each page of said digital file, that the mark printed on each page of the printed file comprises covert data, and reproduction of the printed file as an authenticable printed file is prevented by means of the mark containing data unique to each page of the printed file.

6. Attached at C is a true and accurate copy of a confidential email communication from Wendell Smith to Stephen Davidson relating to the Secure Document Printing concept dated June 4, 2002 and discussing my efforts to obtain patent protection for my invention.
7. By no later than July 13, 2002 I instructed by attorney, Mr. Wesley W. Whitmyer to proceed with the preparation and filing of a provisional patent application directed toward the Secure Document Printing.
8. The Secure Document Printing was constructively reduced to practice by the filing of a provisional patent application Serial No. 60/410,312 on August 6, 2002.
9. All statements in this Declaration made of my own knowledge are true and all statements made on information and beliefs are believed to be true.
10. I understand that willful false statements and the like are punishable by fine or imprisonment or both and may jeopardize the validity of the application or any patent issuing thereon.

I hereby declare, under penalty of perjury under the laws of the United States of America, that the foregoing statements are true and correct.

March 16, 2011



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Wendell M. Smith

## **EXHIBIT A**

# Document verification

## System

Connecting the printed version of  
~~an important document to the~~ encrypted secure  
~~to the virtual version~~.

Only authorized printers with  
coded enable/disable signals  
will "print" a watermark on the  
page as printing the document.

The watermark might be  
hidden covert or overt;  
machine readable for later  
identification. The "ink" might  
be unique with signature of  
verifiable types such as fluorescence,  
DNA<sup>samples</sup>, etc, or an image of SIDS  
printed with selected images and  
or digitally shaped & modified for unique  
marking.

WMS - April 20, 2002 Margaret M. Smith Morgan Q.

## DOCUMENT VERIFICATION SYSTEM

Connecting the printed version of document to the virtual encrypted secure version.

Only authorized printers with coded enable/disable signals will “print” a water mark on the page as printing the document.

The water mark might be hidden covert or overt

Machine readable for later identification. The “ink” might be unique with signature of variable type such as florescence, dna samples etc.. or OVD’s printed with selected images and or shaped and modified for unique markings .

WMS April 20,2002

Margaret M. Smith signature

## **EXHIBIT B**

**CONFIDENTIAL**

**INVENTION DISCLOSURE**

**Secure Document Printing**

This invention relates to the problem of verification that a document is indeed the one intended. It develops from the integration of a digitally secure document with a targeted digitally secure printer that will mark the document and only that one document in such a way that one can prove that it is the intended document and not a copy or a modified document.

Computers are used to originate or process nearly every document in use. The computer file has been developed to the stage that security features can keep the information "safe" from the origination to storage to delivery in the digital format. Newly developed input controls and certification techniques such as fingerprint entry pads to a pc, can assure the next user of the true parties identification at place of origination. The information may be acted on only in digital format. If so, the process is complete. However, many documents are printed for action or for record keeping or for reading later. These printings of the document are more and more likely to be in some remote location.

The object of this invention is to make a printer that can be addressed and linked to the document source with intelligence to carry the security encryption/certification through to print the file. The printer might be arranged to only print if the file is from a selected source, only if it has not been opened, print only once, and with a security mark that can be forensically validated as a true and unblemished copy.

Unique components of this invention:

To accomplish the goal:

The printer must be accessible only by the approved party. The same entry system (such as a fingerprint keypad) as is used for the originator to design or type the document is also applied to the printer.

The printer must be able to distinguish the certification details of the digital file and be activated (the special features activated) by the acceptable code/signal.

The printer must be able to print a mark that can be measurably provably unique.

The printer would either be the same as the primary message printer or else integrated into that printer so that the unique mark is placed on the page as the message is printed. It can

be covert and overt or both. It will effectively water mark that paper as it is printed to provide the same anticounterfeiting advantage of watermarks and other features usually marked at a production factory.

The mark must be unique to this file and to this page of paper. It must be printed in such away that it can not be copied and has a unique (unique to that individual page) number or code.

The paper may have some other features built in before the printing to avoid tampering later.

Existing technology can be applied to create the desired results.

1. Entry control to the digital origination. Several
2. Encryption and Certification. Several
3. Printer access control: Several – same as first step
4. Selective printer activation – Several - same as digital document certification
5. Digital marker to “print” watermark – several – inkjet with dyes, DNA, (covert or overt); Thermal Transfer holographic foil.

WMS April 27, 2002

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## **EXHIBIT C**

From: Wendell Smith [polestar@ibl.bm]  
Sent: Tuesday, June 04, 2002 10:46 AM  
To: Stephen Davidson

Hi

How's business?

CONFIDENTIAL

I hope to talk to you soon about some of my work in security printing.

I have an idea that I (combined with a company I deal with called Impress Systems) could make a printer that would only print a certified

document, only print one copy, only if the file was still untouched,

and print it on uniquely marked paper that could later be proven to be

the one "original" What I see is that security goes "out the window"

once a document has been received and can be printed as many times as

wanted, modified and printed again. Any thoughts? Please keep them to

me in private, I am patenting this concept. Wendell PS we are proceeding with a mini reunion of a small group of 57's on September

26-30 staying at Mid Ocean. If there is any way to use this to assemble

even casually the Dartmouth Bermuda contingent, I'd love to do so.

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